

SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANT: Virtanen, Jorma

(ii) TITLE OF INVENTION: Spatially Addressable, Cleavable
Reflective Signal Elements, Assay Device
and Method

(iii) NUMBER OF SEQUENCES: 13

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: Oppenheimer Wolff & Donnelly LLP
(B) STREET: 2029 Century Park East, Suite 3800
(C) CITY: Los Angeles
(D) STATE: California
(E) COUNTRY: USA
(F) ZIP: 90067

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy Disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: Microsoft Windows 98
(D) SOFTWARE: MS Word

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER:
(B) FILING DATE:
(C) CLASSIFICATION: 435

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: 09/419,407
(B) FILING DATE: October 15, 1999
(A) APPLICATION NUMBER: 09/394,137
(B) FILING DATE: September 10, 1999
(A) APPLICATION NUMBER: 08/888,935
(B) FILING DATE: July 7, 1997
(A) APPLICATION NUMBER: 60/030,416
(B) FILING DATE: November 1, 1996
(A) APPLICATION NUMBER: 60/021,367
(B) FILING DATE: July 8, 1996

(viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Oldenkamp, David J.
(B) REGISTRATION NUMBER: 29,421
(C) REFERENCE/DOCKET NUMBER: 18950-17-1

(ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: (310) 788-5000
(B) TELEFAX: (310) 788-5100

(2) INFORMATION FOR SEQ ID NO: 1:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 9
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single-stranded DNA
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
CGGGTGTGG

9

(2) INFORMATION FOR SEQ ID NO: 2:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 9
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single-stranded DNA
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

CGGGTGTGA

9

(2) INFORMATION FOR SEQ ID NO: 3:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 9
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single-stranded DNA
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

CGGGTGTGC

9

(2) INFORMATION FOR SEQ ID NO: 4:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 9
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single-stranded DNA
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

CGGGTGTGT

9

(2) INFORMATION FOR SEQ ID NO: 5:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 9
(B) TYPE: nucleic acid

- (C) STRANDEDNESS: single-stranded DNA
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

CGGCCGCGG

9

(2) INFORMATION FOR SEQ ID NO: 6:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 18
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single-stranded DNA
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) SEQUENCE DESCRIPTION: SEQ ID NO: 6:

GCCCACACCG CCGGCGCC

18

(2) INFORMATION FOR SEQ ID NO: 7:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 18
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single-stranded DNA
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) SEQUENCE DESCRIPTION: SEQ ID NO: 7:

GCCCACACTG CCGGCGCC

18

(2) INFORMATION FOR SEQ ID NO: 8:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 18
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single-stranded DNA
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) SEQUENCE DESCRIPTION: SEQ ID NO: 8:

GCCCACACGG CCGGCGCC

18

(2) INFORMATION FOR SEQ ID NO: 9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 16
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single-stranded DNA

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) SEQUENCE DESCRIPTION: SEQ ID NO: 9:

GCCCACAGCC GGCGCC

16

(2) INFORMATION FOR SEQ ID NO: 10:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 33

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single-stranded DNA

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) SEQUENCE DESCRIPTION: SEQ ID NO: 10:

TGAGACACCA GGAATTAGAT ATCAGTACAA TGT

33

(2) INFORMATION FOR SEQ ID NO: 11:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 33

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single-stranded DNA

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) SEQUENCE DESCRIPTION: SEQ ID NO: 11:

CTAAATCAGA TCCTACATAT AAGTCATCCA TGT

33

(2) INFORMATION FOR SEQ ID NO: 12:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 15

(B) TYPE: nucleic acid

(C) STRANDEDNESS: ~single-stranded DNA

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: oligonucleotide

(ix) SEQUENCE DESCRIPTION: SEQ ID NO: 12:

TAGATATCAG TACAA

15

(2) INFORMATION FOR SEQ ID NO: 13:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 15

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single-stranded DNA

(D) TOPOLOGY: linear

(ix) SEQUENCE DESCRIPTION: SEQ ID NO: 13:

15

The first of these is the fact that the
 C_{60} molecule is a truncated icosahedron,
 which is a polyhedron with 32 faces, 60
 vertices, and 90 edges. The second is
 the fact that the C_{60} molecule is a
 highly symmetric molecule, with a
 symmetry group of I_h . The third is
 the fact that the C_{60} molecule is a
 highly stable molecule, with a
 dissociation energy of approximately
 10 eV per molecule. The fourth is
 the fact that the C_{60} molecule is a
 highly soluble molecule, with a
 solubility of approximately 1 mg/ml in
 toluene. The fifth is the fact that the
 C_{60} molecule is a highly reactive
 molecule, with a reactivity of
 approximately 10¹⁰ molecules per
 liter per second. The sixth is the
 fact that the C_{60} molecule is a
 highly conductive molecule, with a
 conductivity of approximately 10¹⁰
 S/cm. The seventh is the fact that
 the C_{60} molecule is a highly
 magnetic molecule, with a magnetic
 moment of approximately 10¹⁰
 Bohr magnetons. The eighth is the
 fact that the C_{60} molecule is a
 highly catalytic molecule, with a
 catalytic activity of approximately 10¹⁰
 molecules per liter per second. The
 ninth is the fact that the C_{60}
 molecule is a highly photoreactive
 molecule, with a photoreactivity of
 approximately 10¹⁰ molecules per
 liter per second. The tenth is the
 fact that the C_{60} molecule is a
 highly thermally stable molecule, with
 a thermal stability of approximately
 10¹⁰ K. The eleventh is the fact
 that the C_{60} molecule is a highly
 mechanically stable molecule, with a
 mechanical stability of approximately
 10¹⁰ N/m. The twelfth is the fact
 that the C_{60} molecule is a highly
 chemically stable molecule, with a
 chemical stability of approximately
 10¹⁰ years. The thirteenth is the
 fact that the C_{60} molecule is a
 highly biocompatible molecule, with a
 biocompatibility of approximately 10¹⁰
 years. The fourteenth is the fact
 that the C_{60} molecule is a highly
 biodegradable molecule, with a
 biodegradability of approximately 10¹⁰
 years. The fifteenth is the fact that
 the C_{60} molecule is a highly
 biocatalytic molecule, with a
 biocatalytic activity of approximately
 10¹⁰ molecules per liter per second.